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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,529	07/02/2003	Ryan J. Snodgrass	ZNET.090A	5273
20995 7590 06/06/2007 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			EXAMINER TECKLU, ISAAC TUKU	
			ART UNIT 2192	PAPER NUMBER
			NOTIFICATION DATE 06/06/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcarter@kmob.com  
eOAPilot@kmob.com

<b>Office Action Summary</b>	Application No. 10/612,529	Applicant(s) SNODGRASS ET AL.	
	Examiner Isaac T. Tecklu	Art Unit 2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### DETAILED ACTION

1. This action is responsive to the amendment filed on 02/07/2007.
2. Claims 8-12 and 15 have been amended.
3. New claims 25-27 have been amended.
4. Claims 1- 27 have been examined.

### *Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1-27 are rejected under 35 U.S.C. 102(a) as being anticipate by Matsuoka et al. (US 2002/0010753 A1).

As per claim 1, Matsuoka discloses a dynamic web page generation system (paragraph [0008] "... generates the dynamic web pages ..." and e.g. FIG. 5 and related text), comprising:  
a template processor that generates dynamic web pages (e.g. FIG. 1, 500 and related text) according to corresponding web page templates in response to page requests from browsers (e.g. FIG. 1, 400 and related text),

wherein the template processor generates service requests to request content from a set of services, and uses the content returned by such services to generate the web pages (e.g. FIG. 3, 306 and associated text), according to corresponding web page templates (e.g. FIG. 3, Request 304 and related text);

a monitoring component that monitors the operation of the template processor

over time (paragraph [0040] "... web page is analyzed ... control command ...") and generates a mapping of page generation tasks to corresponding service calls that are made as part of such page generation tasks (paragraph [0028] "... map of all cache files ..."); and

a prefetch component that is responsive to a page request from a browser by using the mapping to identify a set of service requests to be made preemptively (e.g. FIG. 5, 32 and related text), such that service content that is deemed likely to be used by the template processor to generate the requested page is prefetched (paragraph [0029] "... identifies the file using these three components/structure and .... determine whether the requested page has previously ...").

As per claim 2, the dynamic web page generation system of Claim 1, wherein the mapping comprises a table that maps URL to service requests frequently used to respond to requests for such URLs (paragraph [0028] "... map may include a hash table ... URL request ...").

As per claim 3 the dynamic web page generation system of Claim 1, wherein the monitoring component updates the mapping substantially in real time to reflect service requests actually used to generate requested web pages (paragraph [0021] "... continuously updated HTML files ..." and paragraph [0024] "... request fresh copy of the web page ..."), such that service request predictions made by the prefetch component adapt automatically in response to page generation events (paragraph [0021] "... produce web pages at a world wide web browser ...").

As per claim 4 Matsuoka discloses the dynamic web page generation system of Claim 1, wherein the prefetch and monitoring components include a prefetch client component that communicates with a prefetch service component (paragraph [0021] "... continuously updated HTML files ..." and paragraph [0024] "... request fresh copy of the web page ..."), wherein the prefetch client component is responsive to the page request by retrieving from the prefetch service component a listing of service requests associated with the page request, as reflected in the mapping (e.g. FIG. 5).

As per claim 5 Matsuoka discloses the dynamic web page generation system of Claim 4, wherein the prefetch client is configured to send feedback messages to the prefetch service component identifying the service requests actually used to generate requested pages (paragraph [0034] "... sends the file back to browser ..."), and the prefetch service component updates the mapping to reflect the feedback messages (paragraph [0021] "... continuously updated HTML files ..." and paragraph [0024] "... request fresh copy of the web page ...").

As per claim 6 Matsuoka discloses the dynamic web page generation system of Claim 1, wherein the monitoring component comprises an off-line analysis component that analyzes service request activity data collected over time to regenerate and/or update said mapping (e.g. FIG. 4, 208-216 and related text).

As per claim 7 Matsuoka discloses the dynamic web page generation system of Claim 1, wherein the monitoring component and the prefetch component collectively operate so as to allow a second service request that is dependent upon a result of a first service request to be

performed in parallel with the first service request, such that a latency caused by the chaining of dependent service requests is substantially avoided (e.g. FIG. 4, 208-216 and related text).

As per claim 8 Matsuoka discloses the dynamic document generation system of Claim 17, wherein the prefetch component takes service load conditions into consideration in determining whether to make the service requests preemptively, so that unnecessary service requests are reduced during heavy service load conditions (e.g. FIG. 4, 224 and related text ).

As per claim 9 a method for reducing dynamic document generation times (paragraph [0009] “ ... building dynamic web pages in a relatively short time ...”), comprising:

for at least one document generation task, monitoring the performance of the task over time to generate data reflective of frequencies with which specific data retrieval subtasks are performed as part of the document generation task (paragraph [0040] “... web page is analyzed ... control command ...”);

receiving a document request that corresponds to the document generation task (e.g. FIG. 4, element 222 and related text);

in response to receiving the document request, using said data to identify a set of data retrieval subtasks that are deemed likely to be performed as part of the document generation task to generate the requested document (e.g. FIG. 4, element 208 and related text); and

initiating at least some of the data retrieval subtasks in said set before they are initiated as the result of the performance of the document generation task, to thereby

prefetch data that is deemed likely to be used to generate the requested document (e.g. FIG. 4, 210 and related text).

As per claim 10 Matsuoka discloses the method of Claim 9, wherein the data reflective of frequencies with which specific data retrieval subtasks are performed is incorporated within a table that maps document generation tasks to respective sets of subtasks (e.g. FIG. 4, 210 and related text).

As per claim 11 Matsuoka discloses the method of Claim 9, wherein the step of using the data to identify a set of data retrieval subtasks comprises looking up said set of data retrieval subtasks from a table that maps document generation tasks to corresponding subtasks (paragraph [0028] "... map of all cache files ...").

As per claim 12 Matsuoka discloses the method of Claim 9, wherein the method comprises performing second data retrieval subtask that is dependent upon a result of a first data retrieval subtask without waiting for the first data retrieval subtask to be completed (paragraph [0028] "... map of all cache files ...").

As per claim 13 Matsuoka discloses the method of Claim 9, wherein at least some of the data retrieval subtasks in said set are service requests (e.g. FIG. 4, 204 and related text).

As per claim 14 Matsuoka discloses the method of Claim 9, wherein the document generation task corresponds to a particular dynamically generated web page (paragraph [0008] "... generates the dynamic web pages ..." and e.g. FIG. 5 and related text).

As per claim 15 Matsuoka discloses the method of Claim 9, wherein the document generation task corresponds to plurality of related web pages (paragraph [0008] "... generates the dynamic web pages ..." and e.g. FIG. 5 and related text).

As per claim 16 Matsuoka discloses the method of Claim 9, wherein the step of initiating at least some of the data retrieval subtasks comprises selecting subtasks to perform preemptively based at least in-part on current load conditions (e.g. FIG. 4, 220 and related text).

As per claim 17 this is the document generation system version of the claimed web page generation system discussed above (Claim 1), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Matsuoka.

As per claim 18 Matsuoka discloses the dynamic document generation system of Claim 17, wherein the mapping comprises a table that maps URLs to data retrieval subtasks frequently used to respond to requests for such URLs (paragraph [0028] "... map may include a hash table ... URL request ...").



As per claim 19 Matsuoka discloses the dynamic document generation system of Claim 18, wherein at least some of the data retrieval subtasks that are performed preemptively are service requests (paragraph [0029] "... identifies the file using these three components/structure and ...determine whether the requested page has previously ...").

As per claim 20 Matsuoka discloses the dynamic document generation system of Claim 17, wherein the monitoring component updates the mapping in real time to reflect data retrieval subtasks actually used to generate requested documents (paragraph [0029] "... identifies the file using these three components/structure and ...determine whether the requested page has previously ...").

As per claim 21 this is the dynamic document generation system version of the claimed web page generation system discussed above (Claim 4), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Matsuoka.

As per claim 22 this is the dynamic document generation system version of the claimed web page generation system discussed above (Claim 5), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Matsuoka.

As per claim 23 this is the dynamic document generation system version of the claimed web page generation system discussed above (Claim 6), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Matsuoka.

As per claim 24 this is the dynamic document generation system version of the claimed web page generation system discussed above (Claim 8), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Matsuoka.

As per claim 25 (New) this is the dynamic document generation system version of the claimed web page generation system discussed above (Claim 7), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Matsuoka.

As per claim 26 (New) this is the dynamic web page generation system version of the claimed dynamic document generation system discussed above (Claim 25), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Matsuoka.

As per claim 27 (New) this is the method version of the claimed web page generation system discussed above (Claim 7), wherein all claim limitations have been addressed and/or

Art Unit: 2192

covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Matsuoka.

*Response to Arguments*

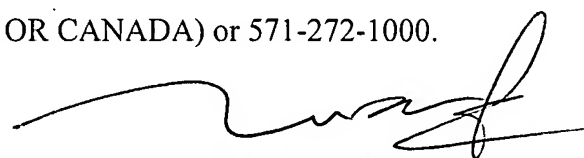
7. Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection. See Matsuoka art made of record.

*Conclusion*

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac T. Tecklu whose telephone number is (571) 272-7957. The examiner can normally be reached on M-TH 9:300A - 8:00P.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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SUPERVISORY PATENT EXAMINER